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INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

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(21) International Application Number: PCT/EP99/07981

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60/106,634 2 November 1998 (02.11.98) US

(71) Applicant (for all designated States except US): CIBA SPE-CIALTY CHEMICALS HOLDING INC. [CH/CH]; Klybeckstrasse 141, CH-4057 Basel (CH).

(72) Inventors; and

(75) Inventors/Applicants (for US only): HÜGLIN, Dietmar [DE/DE]; Dorfstrasse 3, D-79591 Eimeldingen (DE). EHLIS, Thomas [DE/DE]; Ferdinand-Weiss-Strasse 30, D-79106 Freiburg (DE). KRAMER, Erich [AT/CH]; Jägerstrasse 10, CH-4058 Basel (CH). LUPIA, Joseph, Anthony [US/US]; 8511 Quail Creek Drive, Colfax, NC 27235 (US).

(74) Common Representative: CIBA SPECIALTY CHEMICALS HOLDING INC.; Patentabteilung, Klybeckstrasse 141, CH-4057 Basel (CH).

(81) Designated States: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG).

Published

With international search report. Before the expiration of the time limit for amending the claims and to be republished in the event of the receipt of amendments.

(54) Title: STABILISATION OF BODY-CARE AND HOUSEHOLD PRODUCTS

(57) Abstract

A description is given of the use of phenolic antioxidants of formulae (1) and/or (2) and/or (3) for stabilising body-care and household products.

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EE	Estonia	LR	Liberia	SG	Singapore		

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NOTICE INFORMING THE APPLICANT OF THE COMMUNICATION OF THE INTERNATIONAL APPLICATION TO THE DESIGNATED OFFICES

(PCT Rule 47.1(c), first sentence)

CIBA SPECIALTY CHEMICALS HOLDING
INC.
Patentabteilung
Klybeckstrasse 141
CH-4057 Basel
SUISSE

1 9. Mai 2000

PATA PATH SES
HPF

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IMPORTANT NOTICE

From the INTERNATIONAL BUREAU

Date of mailing (day/month/year) 11 May 2000 (11.05.00)

Applicant's or agent's file reference

_____21867/A

International application No.

PCT/EP99/07981

International filing date (day/month/year)
21 October 1999 (21.10.99)

Priority date (day/month/year)
02 November 1998 (02.11.98)

Applicant

CIBA SPECIALTY CHEMICALS HOLDING INC. et al

(=US/P1/PROV)

Notice is hereby given that the International Bureau has communicated, as provided in Article 20, the international application
to the following designated Offices on the date indicated above as the date of mailing of this Notice:
AU,CN,JP,KP,KR,MA,US

In accordance with Rule 47.1(c), third sentence, those Offices will accept the present Notice as conclusive evidence that the communication of the international application has duly taken place on the date of mailing indicated above and no copy of the international application is required to be furnished by the applicant to the designated Office(s).

2. The following designated Offices have waived the requirement for such a communication at this time:

AE,AL,AM,AP,AT,AZ,BA,BB,BG,BR,BY,CA,CH,CR,CU,CZ,DE,DK,DM,EA,EE,EP,ES,FI,GB,GD,GE,GH,GM,HR,HU,ID,IL,IN,IS,KE,KG,KZ,LC,LK,LR,LS,LT,LU,LV,MD,MG,MK,MN,MW,MX,NO,NZ,OA,PL,PT,RO,RU,SD,SE,SG,SI,SK,SL,TJ,TM,TR,TT,TZ,UA,UG,UZ,VN,YU,ZA,ZW

The communication will be made to those Offices only upon their request. Furthermore, those Offices do not require the

applicant to furnish a copy of the international application (Rule 49.1(a-bis)).

 Enclosed with this Notice is a copy of the international application as published by the International Bureau on 11 May 2000 (11.05.00) under No. WO 00/25731

REMINDER REGARDING CHAPTER II (Article 31(2)(a) and Rule 54.2)

If the applicant wishes to postpone entry into the national phase until 30 months (or later in some Offices) from the priority date, a demand for international preliminary examination must be filed with the competent International Preliminary Examining Authority before the expiration of 19 months from the priority date.

It is the applicant's sole responsibility to monitor the 19-month time limit.

Note that only an applicant who is a national or resident of a PCT Contracting State which is bound by Chapter II has the right to file a demand for international preliminary examination.

REMINDER REGARDING ENTRY INTO THE NATIONAL PHASE (Article 22 or 39(1))

If the applicant wishes to proceed with the international application in the **national phase**, he must, within 20 months or 30 months, or later in some Offices, perform the acts referred to therein before each designated or elected Office.

For further important information on the time limits and acts to be performed for entering the national phase, see the Annex to Form PCT/IB/301 (Notification of Receipt of Record Copy) and Volume II of the PCT Applicant's Guide.

The International Bureau of WIPO 34, chemin des Colombettes 1211 Geneva 20, Switzerland **Authorized officer**

J. Zahra

Facsimile No. (41-22) 740.14.35

Telephone No. (41-22) 338.83.38



(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER See Notification	of Transmittal of International Search Report 220) as well as, where applicable, Item 5 below.
NV/P-21867/A	ACTION (FGIII PC1/18A2	220) as well as, where applicable, item 5 below.
International application No.	international filing date (day/month/year)	(Earliest) Priority Date (day/month/year)
PCT/EP 99/07981	21/10/1999	02/11/1998
Applicant		
CIBA SPECIALTY CHEMICALS (HOLDING INC. et al.	
This international Search Report has been according to Article 18. A copy is being tra	n prepared by this International Searching Aut unsmitted to the International Bureau.	hority and is transmitted to the applicant
This international Search Report consists It is also accompanied by	of a total of sheets. a copy of each prior art document cited in this	report.
1. Basis of the report		
 a. With regard to the language, the language in which it was filed, uni 	international search was carried out on the ba ses otherwise indicated under this item.	sis of the international application in the
the international search w Authority (Rule 23.1(b)).	as carried out on the basis of a translation of t	the international application furnished to this
b. With regard to any nucleotide an	d/or amino acid sequence disclosed in the is	nternational application, the international search
was carried out on the basis of the contained in the internation	e sequence listing : nal application in written form.	
벌	mational application in computer readable for	m.
furnished subsequently to	this Authority in written form.	
furnished subsequently to	this Authority in computer readble form.	
the statement that the sub	sequently furnished written sequence listing of	loes not go beyond the disclosure in the
		s identical to the written sequence listing has been
2. Certain claims were four	nd unsearchable (See Box I).	
3. Unity of invention is lact	ding (see Box II).	
4. With regard to the title,		
X the text is approved as su	bmitted by the applicant.	
the text has been established	hed by this Authority to read as follows:	
5. With regard to the abstract.		,
X the text is approved as su	bmitted by the applicant.	
the text has been establis	• • • • • • • • • • • • • • • • • • • •	ity as it appears in Box III. The applicant may, port, submit comments to this Authority.
6. The figure of the drawings to be publi	•	
as suggested by the appli	cant.	None of the figures.
because the applicant fall	ed to suggest a figure.	
because this figure better	characterizes the invention.	

bed

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

(PCT Article 36 and Rule 70)

Applicant's or agent's file reference		Con Notification of Tonogrammat of International
HP/2-21867/A	FOR FURTHER ACTION	See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)
	International Court of the Cour	
International application No.	International filing date (day/month	/year) Priority date (day/month/year) 02/11/1998
PCT/EP99/07981	21/10/1999	. 02/11/1990 .
International Patent Classification (IPC) or na A61K7/00	ational classification and IPC	
70111700		
Applicant		
CIBA SPECIALTY CHEMICALS HO	DLDING INC. et al.	
This international preliminary exam	nination report has been prepared	by this International Preliminary Examining Authority
and is transmitted to the applicant		Toy this international From that y Examining Additionty
2. This REPORT consists of a total of	f 7 sheets, including this cover st	neet.
	•	
		e description, claims and/or drawings which have
	sis for this report and/or sheets c 607 of the Administrative Instruction	ontaining rectifications made before this Authority ons under the PCT).
•		,
These annexes consist of a total or	f sheets.	
2. This report contains indications sale	ating to the following items:	
This report contains indications rela	ating to the following items:	
l ⊠ Basis of the report		
II □ Priority		
III 🛛 Non-establishment of d	opinion with regard to novelty, inv	entive step and industrial applicability
N ⊠ Lack of unity of inventi		
		novelty, inventive step or industrial applicability;
VI	ons suporting such statement red	
	nternational application	
	n the international application	
Date of submission of the demand	Deta of	completion of this report
Date of submission of the demand	Date of C	completion of this report
03/04/2000	14.03.20	001
00,04,2000		
Name and mailing address of the internation	al Authoriz	ed officer
preliminary examining authority: European Patent Office		
D-80298 Munich		الْغِي اللهِ اللهِ Plaza, M.D.
Tel. +49 89 2399 - 0 Tx: 52365 Fax: +49 89 2399 - 4465	· · · · · · · · · · · · · · · · · · ·	ne No. +49 89 2399 8284

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I. Basis of the report

1.	res the	ponse to an invitatio	awn on the basis of (substitute sheets which have been furnished to the receiving Office in n under Article 14 are referred to in this report as "originally filed" and are not annexed to not contain amendments (Rules 70.16 and 70.17).):
	1-3	5	as originally filed
	Cla	ims, No.:	
	1-3	2	as originally filed
2.	lanç	guage in which the ir	uage, all the elements marked above were available or furnished to this Authority in the nternational application was filed, unless otherwise indicated under this item. vailable or furnished to this Authority in the following language: , which is:
		the language of pul	ranslation furnished for the purposes of the international search (under Rule 23.1(b)). blication of the international application (under Rule 48.3(b)). ranslation furnished for the purposes of international preliminary examination (under Rule
3.			eotide and/or amino acid sequence disclosed in the international application, the examination was carried out on the basis of the sequence listing:
		contained in the int	ernational application in written form.
		filed together with t	he international application in computer readable form.
		furnished subseque	ently to this Authority in written form.
		furnished subseque	ently to this Authority in computer readable form.
			the subsequently furnished written sequence listing does not go beyond the disclosure in plication as filed has been furnished.
		The statement that listing has been fur	the information recorded in computer readable form is identical to the written sequence nished.
4.	The	amendments have	resulted in the cancellation of:
		the description,	pages:
		the claims,	Nos.:
		the drawings,	sheets:
5.			en established as if (some of) the amendments had not been made, since they have been eyond the disclosure as filed (Rule 70.2(c)):



(Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.)

6.	Ado	litional observations, if necessary:
III.	Nor	n-establishment of opinion with regard to novelty, inventive step and industrial applicability
1.		questions whether the claimed invention appears to be novel, to involve an inventive step (to be non-ious), or to be industrially applicable have not been examined in respect of:
		the entire international application.
	×	claims Nos. 22-30.
be	caus	se:
		the said international application, or the said claims Nos. relate to the following subject matter which does not require an international preliminary examination (<i>specify</i>):
	⊠	the description, claims or drawings (<i>indicate particular elements below</i>) or said claims Nos. 22-30 are so unclear that no meaningful opinion could be formed (<i>specify</i>): see separate sheet
		the claims, or said claims Nos. are so inadequately supported by the description that no meaningful opinion could be formed.
		no international search report has been established for the said claims Nos
2.	and	reaningful international preliminary examination report cannot be carried out due to the failure of the nucleotide for amino acid sequence listing to comply with the standard provided for in Annex C of the Administrative ructions:
		the written form has not been furnished or does not comply with the standard.
		the computer readable form has not been furnished or does not comply with the standard.
IV.	. Lac	k of unity of invention
1.	In re	esponse to the invitation to restrict or pay additional fees the applicant has:
		restricted the claims.
		paid additional fees.
		paid additional fees under protest.
		neither restricted nor paid additional fees.



2.	×	This Authority found that the req 68.1, not to invite the applicant t	•	nt of unity of invention is not complied and chose, according to Rule t or pay additional fees.
3.	This	is Authority considers that the requ	uirement	t of unity of invention in accordance with Rules 13.1, 13.2 and 13.3 is
		complied with.		
	⊠	not complied with for the following see separate sheet	ng reasor	ns:
4.		onsequently, the following parts of amination in establishing this repo		national application were the subject of international preliminary
	×	all parts.		
		the parts relating to claims Nos.		
V.		easoned statement under Article ations and explanations suppor		ith regard to novelty, inventive step or industrial applicability;
1.	Stat	atement		
	Nov	ovelty (N) Yes:	Claims	21

Yes: No:

Claims 1-20,31,32

Inventive step (IS)

Yes: Claims

No:

Claims 1-21,31-32

Industrial applicability (IA)

Yes: Claims 1-21, 31-32 No: Claims

2. Citations and explanations see separate sheet

VIII. Certain observations on the international application

The following observations on the clarity of the claims, description, and drawings or on the question whether the claims are fully supported by the description, are made: see separate sheet

INTERNATIONAL PRELIMINARY **EXAMINATION REPORT - SEPARATE SHEET**



Re Item III

Non-establishment of opinion with regard to novelty, inventive step and industrial applicability

1. Claim 22 relates to the "use of the phenolic antioxidant according to claim 1 in body-care products for the skin and its adnexa". Claim 22 lacks clarity, since it is not stated the technical effect achieved by the use of the phenolic antioxidant (for instance as stabiliser of the body-care products). Hence, the said claim is unclear with respect to the essential technical feature of its subject-matter. The mention to its presence in a body-care product does not define its use. Moreover, this unclear wording does not exclude uses as those mentioned in Rule 67.1 iv.

This objection also applies, when relevant, to the claims 23-28 which are dependent claims of claim 22.

An analogous objection as that above for claim 22 applies to claim 29 and its dependent claim 30, since claim 29 relates to the "use of the phenolic antioxidant according to claim 1 in household cleaning and treating agents."

Re Item IV

Lack of unity of invention

1. In view of the fact that the prior art discloses the compounds as defined in the present claims for the same uses, there is no single inventive concept linking the uses and possible antioxidants encompassed by the claims. Moreover, there are different documents which may be chosen as closest prior art depending on the nature of the antioxidant and the product which it should stabilise.

Re Item V

Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. The following documents have been considered for the establishment of the



present preliminary examination report:

D1 = EP 0 283 252 A (PROCTER & GAMBLE LTD ; PROCTER & GAMBLE (US)) 21 September 1988 (1988-09-21)

D2 = US 3 356 612 A (D.B.GUNTHRIE) 5 December 1967 (1967-12-05)

D3 = US 4 900 469 A (CARTY DANIEL T ET AL) 13 February 1990 (1990-02-13)

D4 = PATENT ABSTRACTS OF JAPAN vol. 1998, no. 13, 30 November 1998 (1998-

11-30) & JP 10 204479 A (LION CORP), 4 August 1998 (1998-08-04)

D5 = WO 97 27839 A (COLGATE PALMOLIVE CO) 7 August 1997 (1997-08-07)

D6 = EP 0 287 342 A (KURITA WATER IND LTD) 19 October 1988 (1988-10-19)

D7 = DE 196 16 570 A (BASF AG) 30 October 1997 (1997-10-30)

D8 = WO 96 03481 A (PROCTER & GAMBLE) 8 February 1996 (1996-02-08)

D9 = GB 1 456 199 A (BEECHAM GROUP LTD) 17 November 1976 (1976-11-17)

D10 = EP 0 453 396 A (CIBA GEIGY AG) 23 October 1991 (1991-10-23)

D11 = US 5 688 995 A (LUTHER HELMUT ET AL) 18 November 1997 (1997-11-18)

D12 = WO 94 07946 A (CIBA GEIGY AG ;HOFFMANN KURT (DE); HERBST HEINZ

(DE); PFAENDNER RU) 14 April 1994 (1994-04-14)

D13 = EP 0 263 524 A (BASF AG) 13 April 1988 (1988-04-13)

D14 = EP 0 342 483 A (ETHYL CORP) 23 November 1989 (1989-11-23)

D15 = EP 0 415 887 A (CIBA GEIGY AG) 6 March 1991 (1991-03-06)

D16 = US 5 614 572 A (NESVADBA PETER ET AL) 25 March 1997 (1997-03-25)

D17 = GB 2 286 774 A (CIBA GEIGY AG) 30 August 1995 (1995-08-30)

Present claim 1 relates to the use of phenolic antioxidants of formulae 1 or 2 or of 2. antioxidant of formula 3 for stabilising body-care products and household cleaning and treating agents.

The compounds of formulae 1, 2 and 3 are known compounds (see i.a. D1 to D9). The said compounds are also known as antioxidants in the cited prior art. Their use as stabilisers is inherent to their activity as antioxidants (cf. i.a. D1 to D8 for body-care and household). Moreover, household cleaning and treating agents (D1, D2, D3, D4, D5, D7, D9) and body-care product (D5, D7, D8) containing them are also known.

The subject-matter of claim 21 can beconsidered to be novel, since the



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combination of the phenolic antioxidants with the light stabilisers of formula 41 for stabilising body-care and household products (compare, for instance with the triazine derivatives of formula 110 of D10).

3. In view of the major lack of novelty for the presently claimed subject-matter it is not possible at present to make a coherent analysis for inventive step.

With respect of the subject-matter of claim 21 it has to be said that its subject-matter cannot be considered to be inventive in the light of the cited prior art, since the use of combinations of phenolic antioxidants with triazine light stabilisers for stabilising household products is known (see i.a. D10). The structural differences with the compounds chosen in D10 are minor, whereas the breadth of possible combinations claimed in the present application is such that the existence of an unexpected technical effect cannot be credible.

Re Item VII

Certain defects in the international application

1. The description is lacking a reference to the relevant prior art wherein the compounds of formulae 1, 2 or 3 and their uses for cosmetics and household products are disclosed (cf. i.a. D1 to D9).

Re Item VIII

Certain observations on the international application

 The dependent claims 2-7 lack clarity since they relate to the specification of radicals and groups which are only optional in compounds which are not compulsory used. A wording such as that of claim 8 would overcome this objection.

Application No PCT/L 99/07981

A. CLASSIFICATION OF SUBJECT MATTER IPC 7 A61K7/00 C11D1/00

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols) IPC 7 A61K C11D C08K

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

C. DOCUM	ENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	EP 0 283 252 A (PROCTER & GAMBLE LTD; PROCTER & GAMBLE (US)) 21 September 1988 (1988-09-21) page 3, line 38 -page 5, line 16 claims 1-21	1-16,18, 19,29, 30,32
x	US 3 356 612 A (D.B.GUNTHRIE) 5 December 1967 (1967-12-05) column 12, line 1 -column 13, line 35 column 18, line 3 - line 33	1-3,5-9, 15-17, 29,30,32
X	US 4 900 469 A (CARTY DANIEL T ET AL) 13 February 1990 (1990-02-13) column 14, line 42 -column 15, line 56 column 20, line 43 - line 44 claims 1-18	1-3,5-8, 15,16, 29,30,32

Further documents are listed in the continuation of box C.	Patent family members are listed in annex.
Special categories of cited documents: "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international filling date "L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified) "O" document referring to an oral disclosure, use, exhibition or other means "P" document published prior to the international filing date but later than the priority date claimed	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention. "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken sione. "Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person sidiled in the art. "&" document member of the same patent family
Date of the actual completion of the international search	Date of mailing of the International search report
6 March 2000	14/03/2000
Name and mailing address of the ISA European Patent Office, P.B. 5818 Patentiaan 2 NL – 2280 HV Riswijk	Authorized officer
Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fac: (+31-70) 340-3016	Stienon, P

pplication No 9/07981

		PCT/2, 99/07981
	ntion) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	PATENT ABSTRACTS OF JAPAN vol. 1998, no. 13, 30 November 1998 (1998-11-30) & JP 10 204479 A (LION CORP), 4 August 1998 (1998-08-04) abstract	1-3,5-9, 29,30,32
X	WO 97 27839 A (COLGATE PALMOLIVE CO) 7 August 1997 (1997-08-07)	1-9,15, 16,22, 23,26, 29-32
	abstract; claims 1-26	
X	EP 0 287 342 A (KURITA WATER IND LTD) 19 October 1988 (1988-10-19)	1-3,5-9, 15,16, 22,23, 25,31
İ	abstract; claims 1-9	
X	DE 196 16 570 A (BASF AG) 30 October 1997 (1997-10-30)	1-3,5-9, 13,15, 16,29, 30,32
	claims 1-12	30,32
X	WO 96 03481 A (PROCTER & GAMBLE) 8 February 1996 (1996-02-08)	1-6, 8-10,15, 16,18, 20,29, 30,32
	claims 1-10	30,32
x	GB 1 456 199 A (BEECHAM GROUP LTD) 17 November 1976 (1976-11-17)	1,5,6,8, 15-17, 22,23,31
	claims 1-5	22,23,31
١	EP 0 453 396 A (CIBA GEIGY AG) 23 October 1991 (1991-10-23) claims 1-27	
`	US 5 688 995 A (LUTHER HELMUT ET AL) 18 November 1997 (1997–11–18) column 17, line 14 – line 16; claims 1–8	
\	WO 94 07946 A (CIBA GEIGY AG ;HOFFMANN KURT (DE); HERBST HEINZ (DE); PFAENDNER RU) 14 April 1994 (1994-04-14) claims 1-30	
\	EP 0 263 524 A (BASF AG) 13 April 1988 (1988-04-13) claims 1-3 -/	

C.(Continu	INTERNATION DOCUMENTS CONSIDERED TO BE RELEVANT	101/21-33/0/381
Category °	Citation of document, with indication, where appropriate, of the relevant pas	Relevant to claim No.
A	EP 0 342 483 A (ETHYL CORP) 23 November 1989 (1989-11-23) claims 1-10	
A	EP 0 415 887 A (CIBA GEIGY AG) 6 March 1991 (1991-03-06) claims 1-13	
A	US 5 614 572 A (NESVADBA PETER ET AL 25 March 1997 (1997-03-25) claims 1-16	.)
A	GB 2 286 774 A (CIBA GEIGY AG) 30 August 1995 (1995-08-30) claims 1-49	

Form PCT/ISA/210 (continuation of second sheet) (July 1992)

PCT/E, 9/07981

	·				99/0/981
Patent docume		Publication date		Patent family member(s)	Publication date
EP 0283252	Α	21-09-1988	AT	81356 T	15-10-1992
			CA	1302835 A	09-06-1992
			DE	3875142 A	12-11-1992
			DK	146688 A	18-09-1988
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